



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,574	09/22/1999	PHILIP ANDREW WESTLAKE	CQ10037	4835
23493	7590	05/18/2004	EXAMINER	
SUGHRUE MION, PLLC 401 Castro Street, Ste 220 Mountain View, CA 94041-2007			GIBBS, HEATHER D	
			ART UNIT	PAPER NUMBER
			2622	
DATE MAILED: 05/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/401,574

Applicant(s)

WESTLAKE ET AL.

Examiner

Heather D Gibbs

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/28/1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2622

DETAILED ACTION

*Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1,3-7,10-11,12,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Barnett (US 5,967,982).

Regarding claim 1, which is representative of claims 7,11-12,Barnett teaches of a method of determining the location of a feature in an image projection system, the method comprising: 1) projecting a first image of the feature onto a detector with a lens in a first position; 2) sensing, with the detector, the position of the first image of the feature; 3) projecting a second image of the feature onto a detector with a lens in a second position laterally spaced from the first position; 4) sensing, with the detector, the position of the second image of the feature; and 5) deducing the location of the feature from the difference between the positions sensed in steps 2) and 4). (Col 4 Lines 36-57).

Regarding claim 3, Barnett teaches wherein the images of the feature are projected in steps 1) and 3) using the same lens, and wherein the method further comprises moving the lens between the first and second positions (Col 4 Lines 36-44).

Considering claim 4, Barnett teaches wherein the images of the feature are projected onto the same detector 24 in steps 1) and 3). (Fig 2).

Regarding claim 5, Barnett teaches further comprising moving the detector between steps 1) and 3). (Col 4 Lines 40-41).

Art Unit: 2622

Considering claim 6, Barnett teaches further comprising 6) outputting an indication of the location of the feature in accordance with the deduction in step 5). (Col 4 Lines 58-60; Reference 50; Fig 3).

Regarding claim 10, which is representative of claim 14, Barnett teaches further comprising causing relative scanning movement between the detector and the input image (Col 4 Lines 40-41).

*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnett (US 5,967,982) in view of Protz (US 4,666,298).

Barnett discloses a method of determining a location of a feature as discussed above in claim 1.

Barnett does not disclose expressly wherein the detector comprised an array of detector elements, and wherein the positions are sensed in steps 2) and 4) in accordance with the position of the image of the feature on the array.

Protz discloses images produced by the lenses of this array are imaged by means of an objective 2 upon a self scanning detector array 3 being of the charge coupled device-CCD (Col 2 Lines 64-67).

Barnett & Protz are combinable because they are from the same scope of nature in that they use an adaptive optical system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Protz's invention for use in Barnett, as Protz teaches wherein his optical system ascertains errors in the image of an images object.

The suggestion/motivation for doing so would have been as both systems provide an optical correction/detection element.

Therefore, it would have been obvious to combine Barnett with Protz to obtain the invention as specified in claim 2.

4. Claims 8-9,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnett (US 5,967,982) in view of Montgomery et al (US 5,015,070).

Regarding claim 8, which is representative of claim 13, Barnett discloses a method of determining the location of a feature in an image projection system.

Barnett does not disclose expressly wherein the input image is projected onto the detector by illuminating a substrate carrying an original image and directing radiation from the illuminated substrate onto the detector.

Montgomery discloses wherein the input image is projected onto the detector by illuminating a substrate carrying an original image and directing radiation from the illuminated substrate onto the detector (Col 4 Lines 32-55; Fig 2).

Barnett & Montgomery are combinable because they are from embodiments that require optical scanners.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Barnett with the method of Montgomery.

Art Unit: 2622

The suggestion/motivation for doing so would have been as both systems relate to finding a reference point within an optical scanner.

Therefore, it would have been obvious to combine Barnett with Montgomery to obtain the invention as specified in claim 8.

Considering claim 9, Barnett teaches wherein the electronic representation of the input image is corrected in step c) by assigning the feature to an optical component in accordance with the location determined in step b); and correcting the electronic representation of the input image signal in accordance with which optical component has been assigned with the feature (Col 4 Lines 47-50).

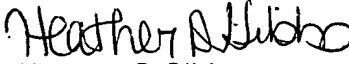
#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Heather D Gibbs  
Examiner  
Art Unit 2622

hdg

  
EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600